ANDERSSON et al
Serial No. 09/829,451

**Atty Dkt:** 2380-187
**Art Unit:** 2665

## REMARKS/ARGUMENTS

Reexamination of the captioned application is respectfully requested.

### A. SUMMARY OF THIS AMENDMENT

By the current amendment, Applicants basically:

1. Editorially amend the specification.
2. Amend claims 1 – 3 and 9.
3. Add new claims 31 - 33.
4. Respectfully traverse all prior art rejections.

### B. PATENTABILITY OF THE CLAIMS

Claims 1-5, 8, 15-16, 19-23, 26, 29 and 30 stand rejected under 35 USC §102(3) as being anticipated by U.S. Patent 6,381,246 to Constantinof et al (see enumerated paragraph 1 of the Office Action). Claims 6, 7, 17, 18, 24 and 25 stand rejected under 35 USC §103(a) as being unpatentable over U.S. Patent 6,381,246 To Constantinof et al in view of U.S. Patent 5,453,985 to Ghisler (see enumerated paragraph 2 of the Office Action). Claims 9-12 and 27-28 stand rejected under 35 USC §103(a) as being unpatentable over U.S. Patent 6,381,246 to Constantinof et al in view of U.S. Patent 6,373,853 to Yoshida (see enumerated paragraph 3 of the Office Action). Claims 13 and 14 stand rejected under 35 USC §103(a) as being unpatentable over U.S. Patent 6,381,246 To Constantinof et al in view of U.S. Patent 6,373,853 to Yoshida and further in view of U.S. Patent 5,453,985 to Ghisler (see enumerated paragraph 4 of the Office Action). All prior art rejections are respectfully traversed for at least the following reasons.

As amended, independent method claim 1 requires making an association, at a first end node of the network and in only one of the call layer and the connection layer, of binding information with connection endpoint information for a first connection end point at the first

end node of the network. These claim requirements, among others, are not taught or suggested by U.S. Patent 6,381,246 to Constantinof et al, as interpreted by the Office Action.

For example, the Office Action cites col. 5, lines 29 – 33 of Constantinof as teaching the associating of binding information with connection end point information. The alleged association of Constantinof, however, occurs at the Subnetwork Signaling Controller 34, which is not a first end node of the network. Moreover, Contantinof's translation (the alleged association) is of a "Called Party Number to a DPC=38 which is the point code of the terminating switch associated with the Called Party Number". Both the Called Party and the DPC=38 are entities/nodes which are separate and distinct from Subnetwork Signaling Controller 34. If the Subnetwork Signaling Controller 34 is the alleged first end node of the network (since it is alleged to make the association), it cannot be said that association is of binding information with *connection endpoint information for a first connection end point at the first end node of the network.* Rather, at best the Called Party Number and the DPC=38 (involved in the alleged association) pertain to another node.

Moreover, if Constantinof's Subnetwork Signaling Controller 34 were arguendo assumed to be the first end node, it cannot be said that it uses binding information *included in the connection layer signaling* to obtain the connection endpoint information for the first connection end point.

The Office Action alleges that col. 5, lines 33 – 37 of Constantinof teach the claimed transmission of the binding information in the call layer. However, the information described in col. 5, lines 33 – 37 is not the same as the alleged binding information of col. 5, lines 29 – 33. Whereas the alleged binding information of col. 5, lines 29 – 33 is either the Called Party Number or the DPC=38, the parameters discussed

in col. 5, lines 33 – 37 are IAM parameters "OPC=27 of the originating switch and the associated CIC=12" which "are mapped to an originating ATM End system Address (AESA) = 115 which corresponds to the Originating NAP 24". (Note, if the activity col. 5, lines 33 – 37, were alleged to be the claimed associating, it would still not be an association (at a first end node) of binding information with *connection endpoint information for a first connection end point at the first end node of the network).*

In actuality, the mapping performed in col. 5, lines 33 – 37 of Constantinof is performed by Subnetwork Signaling Controller 34. In addition, Subnetwork Signaling Controller 34 also performs a mapping of the (already) translated CPD=38 and CIC parameter =12 to a destination ATM End System Address (AESA)=239 which corresponds to the Terminating NAP 30. (*see*, e.g., col. 5, lines 37 – 40). Thereafter, the Subnetwork Signaling Controller 34 sends (over link 33) a request to ATM Connection Manager 36 for a Virtual Channel Connection between ATM End System addresses contained in the request, specifically sending Originating AESA+115, Destination AESA = 239, OPC = 27; DPC = 38, and CIC =12. (*see*, e.g., col. 5, lines 40 – 45). The ATM Connection Manager 36 forwards the request which includes the OPC and CIC values over link 38 to the Originating NAP 24. The Originating NAP then sends an ATM Q.2931 protocol standard SETUP message over ATM signaling link 21 to request the set up of a Virtual Channel Connection to the Terminating NAP 30.

A corresponding IAM is forwarded over the CCS7 signaling network 16 with the following parameters: Called Party Number, Calling Party Number, OPC of NAP = 24; DPC of Terminating Switch = 38, and CIC =12.

Returning to Applicants' independent claim 1, note particularly that the second paragraph limitation requires "in the call layer, transmitting the binding information and an ATM end system address (AESA) of the first end node to a second end node of the network."

If, as seems from the office action, Constantinof's binding information is Called Party Number or DPC=38, Applicants are unable to find any message sent by Constantinof which includes both AESA and Called Party Number or DPC=38. Applicants certainly cannot find any such message sent in Constantinof's call layer. For example, if Constantinof's call layer is the CCS7 signaling layer, what is communicated by Constantinof in the call layer (over link 16) is Called Party Number, Calling Party Number, OPC of NAP = 24; DPC of Terminating Switch = 38, and CIC =12 (*see* col. 5, lines 45 – 49), but NO AESA! And note that what is communicated over CCS7 link 16 is not between a first end node and a second end node (since Subnetwork Signaling Controller 34 is not an end node).

Constantinof does communicate AESA=115 and AESA=239 between layers, i.e., from Subnetwork Signaling Controller 34 to ATM Connection Manager 36 (*see,* col. 5, lines 40 - 45. And *perhaps* the AESAs make it as far as the Originating NAP=24 (*see,* col. 5, lines 49+). But neither ATM Connection Manager 36 or the Originating NAP=24 are second end nodes of the network, as required by Applicants' second paragraph limitation of independent claim 1.

Applicants' somewhat analogous independent claim 19 also specifies that the associating is made at the first end node. As explained above, Constantinof's Subnetwork Signaling Controller 34 is not a first end node, and the mapping performed at Subnetwork Signaling Controller 34 is not the claimed association.

Like independent claims 1 and 19, independent claims 8 and 15 also require transmitting (in the call layer) an ATM end system address (AESA) from a first end node of the network to a second end node of the network, the ATM end system address (AESA) being for a first connection end point at the first end node. As explained with reference to independent claim 1, the messages of Constantinof which include AESAs

are, at best, between layers, and not from a first end node of a network to a second end node of the network.

Independent claims 9 and 27 require associating a dynamic routing number, at a first end node, with both the first end node of the network and with a first connection end point at the first end node. Again, Constantinof's Subnetwork Signaling Controller 34 cannot be the claimed first end node. Moreover, Constantinof does not transmit, through a call layer, a dynamic routing number to a second end node. What Constantinof transmits through CCS7 is predefined, invariant address information (*see*, e.g., col. 5, lines 45 – 49).

The deficiencies of Constantinof are not remedied by Yoshida. Yoshida concerns dynamic address mapping, which is not relevant to Applicants' claims. Applicants use dynamic AESA to describe usage of a pool of AESAs, and from which a reserved AESA is returned to the pool once a connection is established. In other words, in being dynamic the AESA is reusable for setup of other connections. This concept is not taught or suggested in either Constantinof or Yoshida.

Most importantly, all of Applicants' independent claims require (e.g., in the setting up of the connection in the reverse direction from the second end node to the first end node) that the first end node receive back binding information included in connection layer signaling in order for the first end node to determine its first connection end point (or even through connect a switch to the first connection end point). In other words, establishment of the connection cannot be completed until the binding information has been looped back through the connection layer signaling.

By contrast, in Constantinof's ATM network, the ATM Connection Manager 36 supplies Originating NAP=24 with everything necessary so that, after the ATM SETUP message is sent over link 21, all mapping and the end to end virtual bearer can be

completed in both Originating NAP=24 and Terminating NAP=36, without Terminating NAP=36 having to send any binding information back to Originating NAP=24 to enable Originating NAP=24 to ascertain its first connection end point.

There are numerous other features of patentable merit in Applicants' claims, both independent claims and dependent claims not specifically herein discussed. As a non-limiting example, see new dependent claims 31 - 33, dependent on claims 1, 19, and 9, respectively, which further specify that the association is known only in the layer in which the association is made. Support for the new claims is manifest through all embodiments, as evidenced by the fact that in each embodiment the association table is known only in one layer. In Constantinof it is not true that the association is known only in the layer in which the association is made. Referring to column 5, lines 22-67, Constantinoff describes a mapping of OPC=27 and CIC=12 to an originating AESA=115 corresponding to the originating NAP and the DPC=38 and CIC=12 to an destination AESA=239 corresponding to the terminating NAP (lines 25-40). All this mapping is visible to the subnetwork controller through preconfigured mapping tables. Through these tables the circuit network is connected to the ATM network at both ends. Constantinoff certainly cannot anticipate claim 2 which requires that the association be made in the connection layer and unknown to the call layer (especially considering the fact that Constantinof's subnetwork controller, alleged to make the association, is not in the connection layer and does know the mapping.

Applicants reserve the right, should such be necessary, at future date to expound the patentable virtues of other limitations and to rebut the alleged combineability of the applied references. Applicants sincerely believe, however, that the Examiner has now been afforded sufficient insight to remove the existing prior art rejections and to pass the application to issue. Should the Examiner be of a contrary inclination and persist with a rejection based on Constantinof, it is respectfully requested that the Examiner provide a

detailed rebuttal of all factors now presented by Applicants, and explain which signal or message of Constantinof corresponds to each step of Applicants' claims or each element of Applicants' structure.

## C. MISCELLANEOUS

In view of the foregoing and other considerations, all claims are deemed in condition for allowance. A formal indication of allowability is earnestly solicited.

The Commissioner is authorized to charge the undersigned's deposit account #14-1140 in whatever amount is necessary for entry of these papers and the continued pendency of the captioned application.

Should the Examiner feel that an interview with the undersigned would facilitate allowance of this application, the Examiner is encouraged to contact the undersigned.

Respectfully submitted,
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